EXHIBIT 33
REDACTED

GDN bidding dynamics

PRIVILEGED AND CONFIDENTIAL

Bernanke

- Margin optimization technology to significantly improves Adwords win rate and revenue on AdX
- Adwords * Adx publishers
    - Revenue ███
    - Impressions ███
    - Neutral CPD

Pre-Bernanke world

- We run the internal ████ auction, pick the 2 highest bids b1 and b2
- Take the buy-side revshare out and submit these to the Adx auction
  - b1 ████
  - b2 *████
- Adx runs <mark>a second price auction</mark> and returns price *c* to the winner (say Adwords)
  - Adwords second priced itself █ ██ of impressions i.e. ████████
  - Payout = c
  - Revenue = ████████
- If Adwords only submitted 1 bid, payout dropped █████, adwords profit ████

Reinvesting profits (in ads)

- Submit only 1 bid
- Instead of submitting b1 ██████, submit b1 * α, where α >= ████
  - Additional impressions won all have ██████████, so b1 < c / ██
  - Payout = c
  - Old Revenue = ████████████████████
  - Revenue = ████████████████████
  - Results in a margin █ ████
- Find α such that overall margin ████████

No first pricing logic (optional slide for tech-talk)

- Revenue = ████████████████ leads to first pricing on all impressions won because of Bernanke
- Second price auction mechanics: buyer pays the minimum bid to win (i.e., nearest competition)
- In the Bernanke world, what is the minimum bid to win?
  - ████ ██
  - ██ ██ █
  - Minimum bid to win = ████████
- Launched for all opt advertisers for compatibility with HDMI

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Global Bernanke

- Removes the margin constraint per publisher and uses ▮▮▮ margin for all adwords * adx
- ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮
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- Added another ▮▮▮

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- Very similar to Bernanke
- ██ ██
- α is chosen to hit ███ per █████ exchange
- <u>Impact</u>
  - ████ revenue
  - ███████